



71914.ST25.txt
SEQUENCE LISTING

<110> COUNCIL OF SCENTIFIC AND INDUSTRIAL RESEARCH
Rao, Nalam M
Acharya, Priyamvada

<120> STABLE GENE VARIANTS OF LIPASES

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<140> US 10/768,951
<141> 2004-01-29

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<170> PatentIn version 3.3

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Ser Arg Asp Lys Leu Tyr Ala Val Asp Phe Trp Asp Lys Thr Gly Thr
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Asn Tyr Asn Asn Gly Pro Val Leu Ser Arg Phe Val Gln Lys Val Leu
50 55 60

Asp Glu Thr Gly Ala Lys Lys Val Asp Ile Val Ala His Ser Met Gly
65 70 75 80

Gly Ala Asn Thr Leu Tyr Ile Lys Asn Leu Asp Gly Gly Asn Lys
85 90 95

Val Ala Asn Val Val Thr Leu Gly Gly Ala Asn Arg Leu Thr Thr Gly
100 105 110

Lys Ala Leu Pro Gly Thr Asp Pro Asn Gln Lys Ile Leu Tyr Thr Ser
115 120 125

Ile Tyr Ser Ser Ala Asp Met Ile Val Met Asn Tyr Leu Ser Arg Leu
130 135 140

Asp Gly Ala Arg Asn Val Gln Ile His Gly Gly His Ile Gly Leu Leu
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145 150 155 160

Tyr Ser Ser Gln Val Asn Ser Leu Ile Lys Glu Gly Leu Asn Gly Gly
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Gly Gln Asn Thr Asn
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Asn Tyr Asn Asn Gly Pro Val Leu Ser Arg Phe Val Gln Lys Val Leu
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Asp Glu Thr Gly Ala Lys Lys Val Asp Ile Val Ala His Ser Met Gly
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Gly Ala Asn Thr Leu Tyr Tyr Ile Lys Asn Leu Asp Gly Gly Asn Lys
85 90 95

Val Ala Asn Val Val Thr Leu Gly Gly Ala Asn Arg Leu Thr Thr Gly
100 105 110

Lys Ala Leu Pro Gly Thr Asp Pro Asn Gln Lys Ile Leu Tyr Thr Ser
115 120 125

Ile Tyr Ser Ser Ala Asp Met Ile Val Met Asn Tyr Leu Ser Arg Leu
130 135 140

Asp Gly Ala Arg Asn Val Gln Ile His Gly Gly His Ile Gly Leu Leu
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Gly Ala Asn Thr Leu Tyr Tyr Ile Lys Asn Leu Asp Gly Gly Asn Lys
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Val Ala Asn Val Val Thr Leu Gly Gly Ala Asn Arg Leu Thr Thr Gly
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Lys Ala Leu Pro Gly Thr Asp Pro Asn Gln Lys Ile Leu Tyr Thr Ser
115 120 125

Ile Tyr Ser Ser Asp Asp Met Ile Val Met Asn Tyr Leu Ser Arg Leu
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Asp Glu Thr Gly Thr Lys Val Asp Ile Val Ala His Ser Met Gly
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Ile Tyr Ser Ser Ala Asp Met Ile Val Met Asn Tyr Leu Ser Arg Leu
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Gly Ala Asn Thr Leu Tyr Tyr Ile Lys Asn Leu Asp Gly Gly Asn Lys
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Lys Ala Leu Pro Gly Thr Asp Pro Asn Gln Lys Ile Leu Tyr Thr Ser
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Asp Gly Ala Arg Asn Val Gln Ile His Gly Gly His Ile Gly Leu Leu
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Asp Glu Thr Gly Ala Lys Lys Val Asp Ile Val Ala His Ser Met Gly
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Gly Ala Asn Thr Leu Tyr Tyr Ile Lys Asn Leu Asp Gly Gly Asn Lys
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Lys Ala Pro Pro Gly Thr Asp Pro Asn Gln Lys Ile Leu Tyr Thr Ser
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Ile Tyr Ser Ser Asp Asp Met Ile Val Met Asn Tyr Leu Ser Arg Leu
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Asp Gly Ala Arg Asn Val Gln Ile His Gly Gly His Ile Gly Leu Leu
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Gly Ala Asn Thr Leu Tyr Tyr Ile Lys Asn Leu Asp Gly Gly Asn Lys
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Lys Ala Leu Pro Gly Thr Asp Pro Asn Gln Lys Ile Leu Tyr Thr Ser
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Ile Tyr Ser Ser Ala Asp Met Ile Val Met Asn Tyr Leu Ser Arg Leu
130 135 140

Asp Gly Ala Ser Asn Val Gln Ile His Gly Gly His Ile Gly Leu Leu
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Val Ala Asn Val Val Thr Leu Gly Gly Ala Asn Arg Leu Thr Thr Gly
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Lys Ala Pro Pro Gly Thr Asp Pro Asn Gln Lys Ile Leu Tyr Thr Ser
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Ile Tyr Ser Ser Ala Asp Met Ile Val Met Asn Tyr Leu Ser Arg Leu
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Asn Tyr Asn Asn Gly Pro Val Leu Ser Arg Phe Val Gln Lys Val Leu
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115 120 125

Ile Tyr Ser Ser Ala Asp Met Ile Val Met Asn Tyr Leu Ser Arg Leu
130 135 140

Asp Gly Ala Arg Asn Val Gln Ile His Gly Gly His Ile Gly Leu Leu
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Gly Gln Asn Thr Asn
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Asn Tyr Asn Asn Gly Pro Val Leu Ser Arg Phe Val Gln Lys Val Leu
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Gly Ala Asn Thr Leu Tyr Tyr Ile Lys Asn Leu Asp Gly Gly Asn Lys
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Ile Tyr Ser Ser Ala Asp Met Ile Val Met Asn Tyr Leu Ser Arg Leu
130 135 140

Val Gly Ala Arg Asn Val Gln Ile His Gly Gly His Ile Gly Leu Leu
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Gly Gln Asn Thr Asn
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35 40 45

Asn Tyr Asn Asn Gly Pro Val Leu Ser Arg Phe Val Gln Lys Val Leu
50 55 60

Asp Glu Thr Gly Val Lys Lys Val Asp Ile Val Ala His Ser Met Gly
65 70 75 80

Gly Ala Asn Thr Leu Tyr Tyr Ile Lys Asn Leu Asp Gly Gly Asn Lys
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Val Ala Asn Val Val Thr Leu Gly Gly Ala Asn Arg Leu Thr Thr Gly
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35 40 45

Asn Tyr Asn Asn Gly Pro Val Leu Ser Arg Phe Val Gln Lys Val Leu
50 55 60

Asp Glu Thr Gly Ala Lys Lys Val Asp Ile Val Ala His Ser Met Gly
65 70 75 80

Gly Ala Asn Thr Leu Tyr Tyr Ile Lys Asn Leu Asp Gly Gly Asn Lys
85 90 95

Val Ala Asn Val Val Thr Leu Gly Gly Ala Asn Arg Leu Thr Thr Gly
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Lys Ala Pro Pro Gly Thr Asp Pro Asp Gln Lys Ile Leu Tyr Thr Ser
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71914.ST25.txt

Ile Tyr Ser Ser Asp Asp Met Ile Val Met Asn Tyr Leu Ser Arg Leu
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Asp Gly Ala Arg Asn Val Gln Ile His Gly Gly His Ile Gly Leu Leu
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Gly Gln Asn Thr Asn
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ttatcaagat tagatggtgc tagaaacgtt caaatccatg gcgttggaca catcggcctt 480
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ggcgcgaaca cactttacta cataaaaaat ctggacggcg gaaataaaagt tgcaaacgtc     300
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71914.ST25.txt

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71914.ST25.txt

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71914.ST25.txt

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tacgaattaa tga 553

EXHIBIT B

**Applicants: Nalam Madhusdhana Rao and
Piyamvada Acharya
U.S. Serial No.: 10/768,951
Filed: January 29, 2004**